DNV·GL

Certificate No:
TAK000004N
File No:
335.24
Job Id:
262.1-020365-1

TYPE EXAMINATION CERTIFICATE

This is to certify:

That the Protective Coating Systems - Offshore Structures

with type designation(s)
EP-988 (1x200 µm) / EP-988 (1x200 µm) / UP-450 (1x60 µm)

Manufactured by
Yung Chi Paint & Varnish Mfg. Co. Ltd.
Kaohsiung, Taiwan

is found to comply with
ISO 20340:2009 "Paints and varnishes – Performance requirements for protective paint systems for offshore and related structures"

Application :

For use as coating system in environment of corrosivity category C5-M (atmospheric zone) in accordance with the stated Standard.

This Certificate is valid until **2019-12-01**.

Issued at **Høvik** on **2015-12-02**

for **DNV GL**

DNV GL local station: **Kaohsiung**

Approval Engineer: **Gisle Hersvik**

Martin Strande
Head of Section

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.
The validity date relates to the Type Examination Certificate and not to the approval of equipment/systems installed.

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Product description

EP-988 (1x200 µm) / EP-988 (1x200 µm) / UP-450 (1x60 µm)

Description of the Coating system, tested on bare steel;
— **EP-988** Epoxy High Solids Coating for Anti-Corrosion
— **EP-988** Epoxy High Solids Coating for Anti-Corrosion
— **UP-450** Polyurethane Coating, HS

For use as coating system in "environment of corrosivity category C5-M" (atmospheric zone) in accordance with ISO 20340:2009. The system shall be applied in the same thicknesses as stated above, however, please refer to the ISO 20340:2009, Section 6.2, Table 3 (Corrosivity category of environment; C5-M) regarding minimum requirements for the protective coating system.

Application/Limitation

This approval is solely connected to the corrosion prevention properties of the coating system. The approval does not include any evaluation of toxicity, contamination, pollution, or fire technical aspects.

Type Examination documentation
Tests carried out

Type Testing carried out in accordance with **Type Examination documentation**, ref.:
- CCS-DNV Technology Institute Technical Report No. CDTI-CL-15F016 "Pre-qualification Testing in accordance with ISO 20340:2009, Category C5-M" of 2015-10-20.

Marking of product

Products forming parts of the coating system shall be marked with *manufacturer's name*; **Yung Chi Paint & Varnish Mfg. Co. Ltd., Taiwan** and *type designations*.

The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the DNV GL Type Examination Certificate.

Periodical assessment

The scope of the Periodical Assessment is to verify that the conditions stipulated for the Type Examination is complied with and that no alterations are made to the product design or choice of materials.

Periodical Assessment to be performed after two (2) years (Certificate Retention) and at renewal after four (4) years (Certificate Renewal).

The main elements of the Periodical Assessment are to:
- Ensure that **Type Examination documentation** is available.
- Review design, materials, production process, and performance with respect to possible changes, in order to ensure compliance with **Type Examination documentation** and/or referenced material specifications.
- Ensure traceability between manufacturer's product marking and the DNV GL Type Examination Certificate.

END OF CERTIFICATE